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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/750,179	12/31/2003	Fabricio C. Possamai	04306/100M372-US1	5013

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EXAMINER

SOLAK, TIMOTHY P

ART UNIT	PAPER NUMBER
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3746

DATE MAILED: 07/27/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/750,179

Applicant(s)

POSSAMAI ET AL.

Examiner

Timothy P. Solak

Art Unit

3746

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 06 May 2005.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-13 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 11 and 12 is/are rejected.
- 7) ☒ Claim(s) 1-10 and 13 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 31 December 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☒ Certified copies of the priority documents have been received in Application No. 10/332,206.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- ☒ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 05/06/2005.
- ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- ☐ Notice of Informal Patent Application (PTO-152)
- ☐ Other: _____

DETAILED ACTION

Claim Objections

Claims 1-13 are objected to because of the following informalities:

- * Recitation of "the contour of the discharge orifice" in Claim 1, line 9, would be clearer if rewritten as --a contour of the discharge orifice--.
- * Recitation of "the latter" in Claim 1, line 11 and in Claim 12, line 3, is not clear in context. It is unclear as to whether "the latter" infers either one of the two or just the last. In other words, does "the latter" infer, the at least one, namely the internal contour of the compression cylinder or the discharge orifice; or does it always infer the discharge orifice?
- * Recitation of "means of a transition" in Claim 1, line 14 and in Claim 11, line 9, is not clear in context. It is unclear as to whether or not applicants are attempting to invoke -35 USC § 112, sixth paragraph. Applicant can either amend the claim language to remove the term "means" or declare applicants intention in reply to this action.

Appropriate correction is required.

Comments

With respect to Claim 1, line 3, the Examiner notes that recitation of "(10)" has not been deleted as would have been expected. This is neither a rejection nor an objection. Applicants

can leave the text as is or remove it if they wish. However in the current electronic format, the Examiner is no longer able to make minor changes to the application.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claim 11 is rejected under 35 U.S.C. 103(a) as being unpatentable over Hare (DE 26 42 658). Hare teaches a compression cylinder 13, a valve plate 15 and a suction pipe 45 disposed adjacent to the valve plate and substantially orthogonal to a cylinder axis. Hare further teaches a discharge orifice 12 and at least one suction orifice 11 disposed internal to an axial projection of an internal contour of the compression cylinder and external to a contour of the discharge orifice. Hare further discloses said suction orifice comprises an end opened to the inside of the compression cylinder and an opposite end opened and connected to the suction pipe via a transition portion (not labeled; but clearly seen in Figure 1 as the curved lip portion of the suction pipe located next to the intake valve 11). Although Hare teaches most of the limitations of the claim, including a transition having a cross sectional area configured to change flow direction (see Figure 1), he does not disclose the intended use of the apparatus namely, using the whole cross sectional area. With respect to the intended use of the apparatus, the prior art teaches all of the structural limitations set forth in the claim and is therefore capable of performing all the possible uses of such a structure. Therefore, it would have been obvious to

one of ordinary skill in the art at the time the invention was made to have used the whole cross sectional area, in the pump taught by Hare, to have advantageously increase the utility of the unit.

Claim 12 is rejected under 35 U.S.C. 103(a) as being unpatentable over Hare (mentioned previously), in view of Hovarter (5,147,190). Although Hare teaches most of the limitations of the claim, including a valve plate having an inlet orifice defining a suction passage 11, he does not disclose the inlet orifice to occupy an angular sector concentric to an internal contour of a compression cylinder and discharge orifice in order to maintain a minimum spacing. Hovarter, disclosing a valve plate 46 specifically teaches a suction orifice 48 occupying an angular sector (see Figure 5) concentric to a discharge valve 50 and an internal contour of the compression cylinder (see Figure 3). Hovarter teaches the valve design advantageously increased flow efficiency (column 2, lines 20-25). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have used the valve design taught by Hovarter, in the pump disclosed by Hare, to have advantageously increased flow efficiency.

Allowable Subject Matter

Claims 1-10 would be allowable if rewritten to overcome the objection(s), set forth in this Office action.

Claim 13 would be allowable if rewritten to overcome the objection(s), set forth in this Office action and to include all of the limitations of the base claim and any intervening claims.

Response to Arguments

Applicant's arguments, filed 05/06/2005, have been fully considered. However, they contain no arguments requiring rebuttal.

Reasons for Allowance

The following is a statement of reasons for the indication of allowable subject matter: the prior art of record, does not teach or make obvious the apparatus of Claim 13, specifically a small hermetic compressor having a valve plate, a suction pipe disposed adjacent to the valve plate and substantially orthogonal to a cylinder axis; at least one suction orifice comprising an end opened to an inside of a compression cylinder and an opposite end opened and connected to the suction pipe via a transition portion, but more specifically a discharge orifice substantially centralized in relation to an axial projection of an internal contour of the compression cylinder

Although Hovarter discloses a discharge orifice in the center of a compression cylinder, such a modification to Hare would not be obvious; because a manifold supports the central position of the Hare valve plate.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

- Riffe (5,733,108) teaches a hermetic compressor having a suction pipe.

Art Unit: 3746

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Timothy P. Solak whose telephone number is 571 272-4833. The examiner can normally be reached on Monday through Friday from 10am to 6pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Timothy S. Thorpe can be reached on 571 272-4444. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Timothy P. Solak
Examiner
Art Unit 3746
July 25, 2005